



**\*Ready for 5G**

## PRODUCT DESCRIPTION

Tpli™ 200 is a premium gap filler. A unique blend of boron nitride and silicone produce the highest performing interface pad.

Tpli 200's exceptional combination of high thermal conductivity and compliancy generate unmatched thermal resistances in a gap filling interface material.

Tpli 200 absorbs shock and relieves stresses, thus minimizing potential damage to components. Tpli 200 is electrically insulating, stable from -45°C to 200°C, and meets UL 94 HB rating.

## FEATURES AND BENEFITS

- Soft and compliant
- High Thermal performance
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

## SPECIFICATIONS

| TYPICAL PROPERTIES                    | TYPICAL VALUE                       | TEST METHOD           |
|---------------------------------------|-------------------------------------|-----------------------|
| <b>Construction &amp; Composition</b> | Boron nitride filled silicone sheet | N/A                   |
| <b>Color</b>                          | Varies by thickness                 | Visual                |
| <b>Thickness Range</b>                | 0.25mm (0.010") - 5.08mm (0.20")    | N/A                   |
| <b>Thickness Tolerance</b>            | +/- 10%                             | N/A                   |
| <b>Thermal Conductivity (W/mK)</b>    | 6.0                                 | ASTM D5470            |
| <b>Density (g/cc)</b>                 | 1.4                                 | Helium Pyncometer     |
| <b>Hardness (Shore 00)</b>            | 70                                  | ASTM D2240            |
| <b>Outgassing TML (weight %)</b>      | 0.46                                | ASTM E595             |
| <b>Outgassing CVCN (weight %)</b>     | 0.15                                | ASTM E595             |
| <b>Temperature Range</b>              | -45°C to 200°C                      | N/A                   |
| <b>Rth@ 40 mils, 10 psi, 50°C</b>     | 0.25°C-in <sup>2</sup> /W           | ASTM D5470 (modified) |
| <b>* Dielectric Constant @ 10GHz</b>  | 3.2 *                               | ASTM D150             |
| <b>UL Flammability Rating</b>         | HB                                  | UL 94                 |
| <b>Volume Resistivity</b>             | 5x10 <sup>13</sup> ohm-cm           | ASTM D257             |



# Tpli 200 Series Thermal Gap Filler

## AVAILABILITY

### STANDARD THICKNESSES

- 0.25mm (0.010") to 5.0mm (0.200") thick material available in 0.25mm (0.010") increments
- Available in standard sheet sizes of 16" x 16" and 8" x 8" or custom die cut parts

### REINFORCEMENT

- Fiberglass is required in thicknesses of 0.010" (0.25mm) and 0.015" (0.38mm)
- Reinforcement is optional in thicknesses 0.020" (0.5mm) and 0.025" (0.63mm). Indicate fiberglass by "FG" suffix
- Thicknesses above 0.025" (0.63mm) are not reinforced

### OPTIONS

- A0 - no adhesive
- A1 – adhesive on one side

### POST CURE

- Post Curing option available. Indicate post cure by "PC" suffix

## PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. Tpli 2xx indicates Tpli 200 product line with thickness in mils (0.001")

### EXAMPLES:

- Tpli 240,A0 = 0.040 inch thick Tpli™ 200 material with no adhesive
- Tpli 280,A1 = 0.080 inch thick Tpli™ 200 material with one side adhesive
- Tpli 220FG,A1 = 0.020 inch thick Tpli™ 200 material with fiberglass reinforcement and one side adhesive
- Tpli 260,PC = 0.060 inch thick Tpli™ 200 material post cured